

$\frac{d^2}{dt^2} \left( \frac{\partial L}{\partial \dot{x}} \right) = \frac{\partial L}{\partial x}$

1 2 3 4 5 6 7

1 2 3 4 5 6

The diagram shows a 10x10 grid. The top row contains 10 empty cells. Below this row, there are 9 horizontal lines, each with 10 downward-pointing arrows, one in each column. These arrows point to the bottom row of the grid, which also contains 10 empty cells. This structure represents a mapping or flow from the top row to the bottom row.

1 2 3 4 5 6

# Figure 2

## VecTest™

### MALARIA Sporozoite Antigen Panel Assay

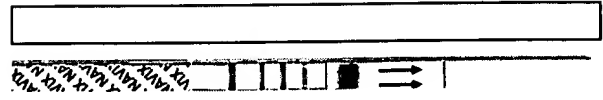
- ◆ *Plasmodium falciparum*
- ◆ *Plasmodium vivax* 210
- ◆ *Plasmodium vivax* 247

Store at room temperature

FOR INVESTIGATIONAL USE ONLY

NAVIX

Medical Analysis Systems, Inc.  
524 Flynn Road, Camarillo, CA 93012



Signal pattern:

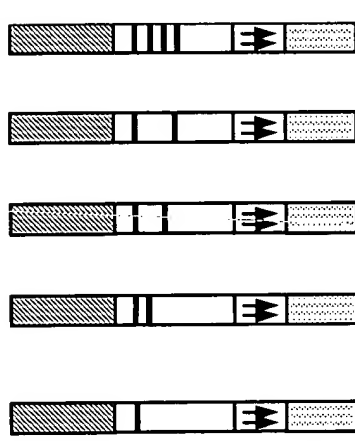
Control →  
Pf →  
Pv 210 →  
Pv 247 →

Place your test  
strip in the box  
for comparison

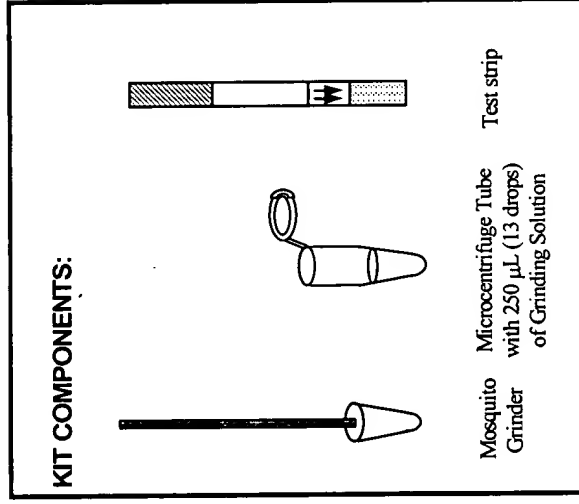
### INTERPRETATION OF RESULTS:

Positive for different analytes:

Negative Pf Pv 210 Pv 247  
Pf Pv 210 Pv 247



- The test should be interpreted positive only if at least two lines appear on the strip.
- The test is negative when only one line (control line) develops on the strip.
- Discard strip if no line develops. The test results are not valid if control line does not develop.



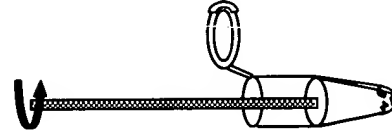
### PROCEDURE:

PREPARE MOSQUITOES FOR TEST

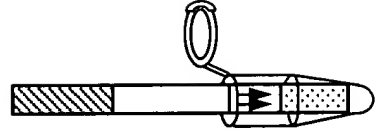


PLACE MOSQUITO PARTS (HEAD AND THORAX) INTO THE GIVEN TUBES WITH 250 µL (13 DROPS) OF GRINDING SOLUTION

HOMOGENIZE SAMPLE

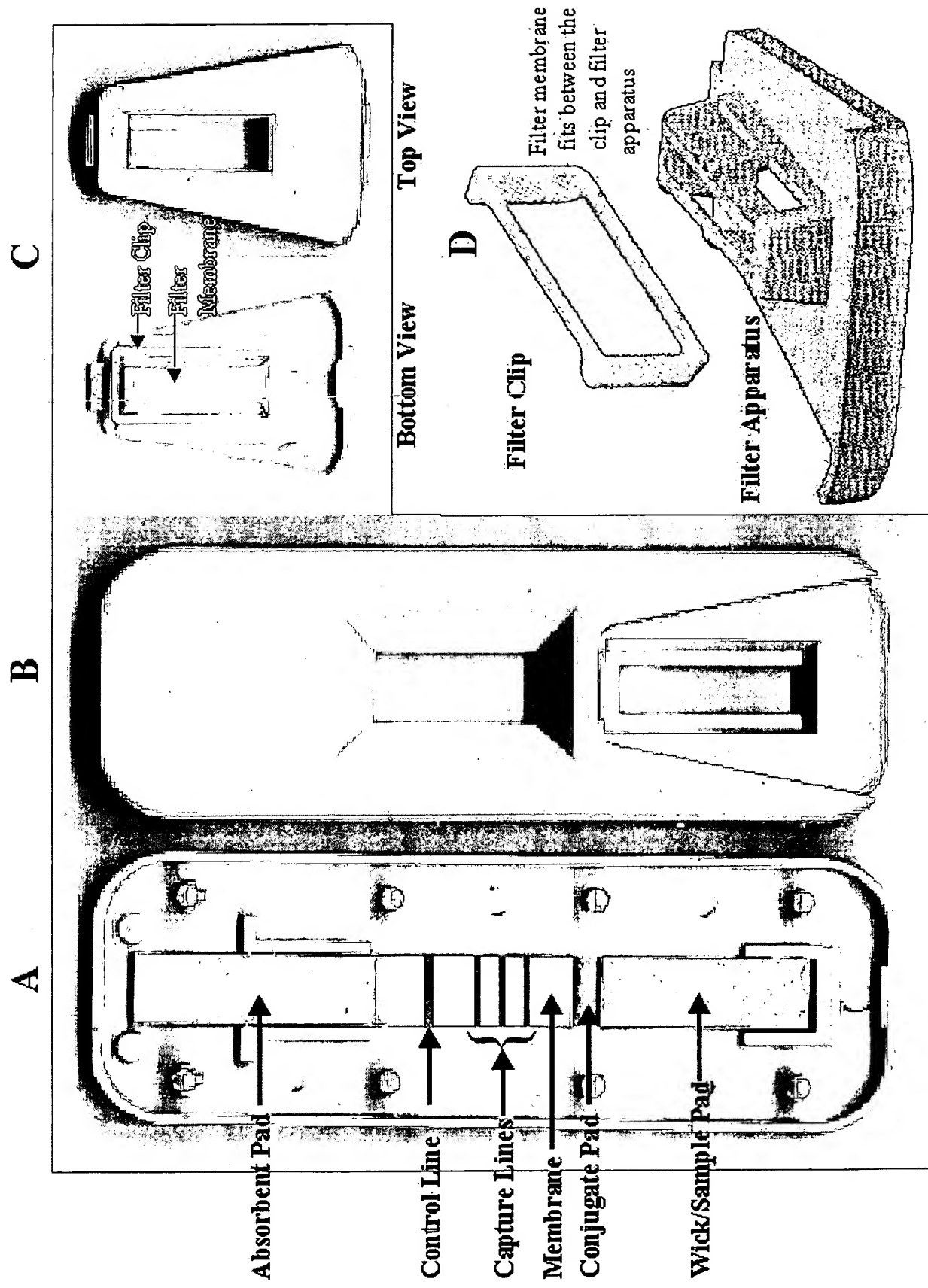


REMOVE THE GRINDER, PLACE THE DIPSTICK IN THE SAMPLE TUBE AS SHOWN IN THE FIGURE



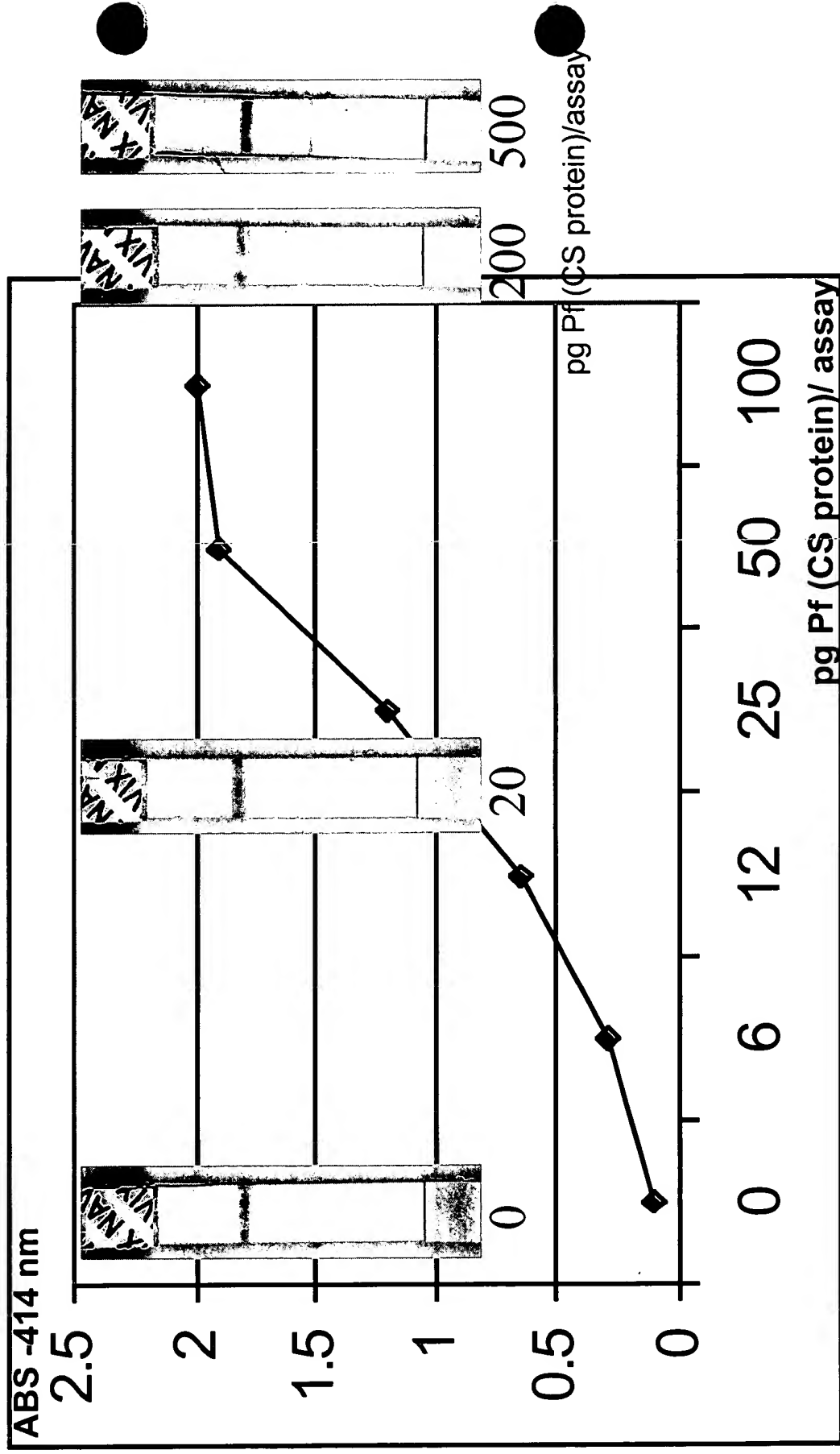
WAIT 15 MINUTES BEFORE READING RESULTS

Figure 3:



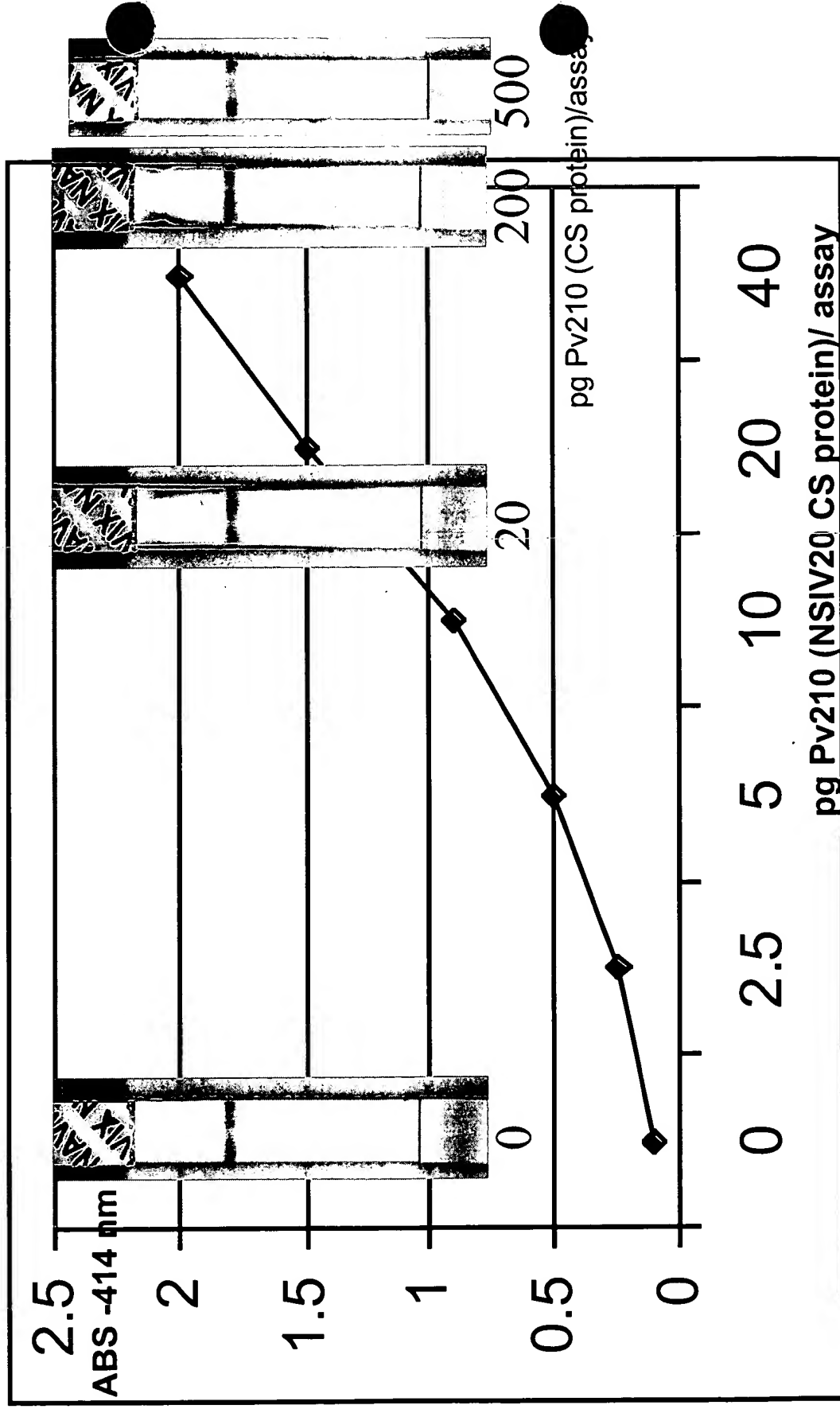
# *Plasmodium falciparum* CS Protein Detection

ELISA versus Dipstick: Figure 4



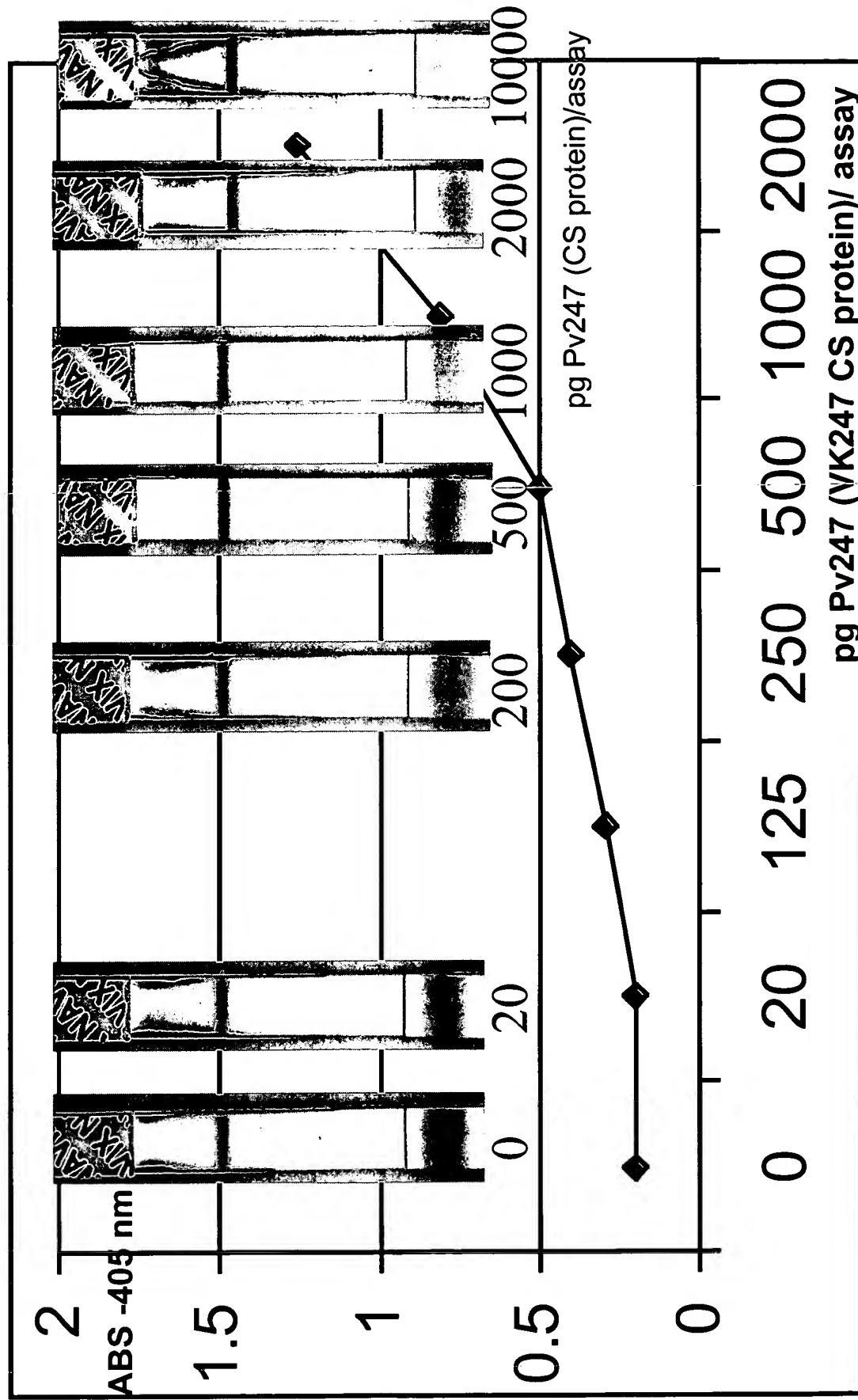
# *Plasmodium vivax* 210 CS Protein Detection

ELISA versus Dipstick: Figure 5



# *Plasmodium vivax* 247 CS Protein Detection

ELISA versus Dipstick: Figure 6

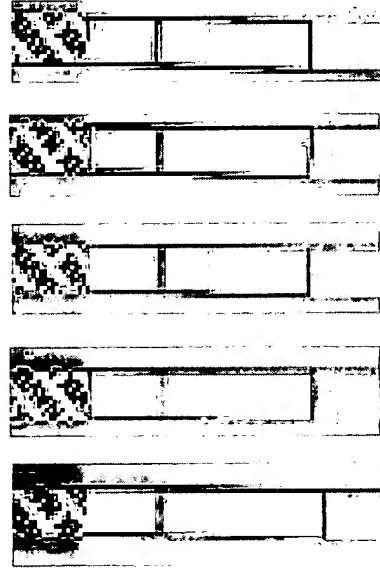


## Panel Dipstick Detection of *Plasmodium* Sporozoites in Infected Mosquitoes: Figure 7

Mosquito (MQ) extract:

Pf infected mosquitoes

1MQ, 1MQ, 2MQ, 3MQ, 5MQ



>400 300 30 300

Pf sporozoites

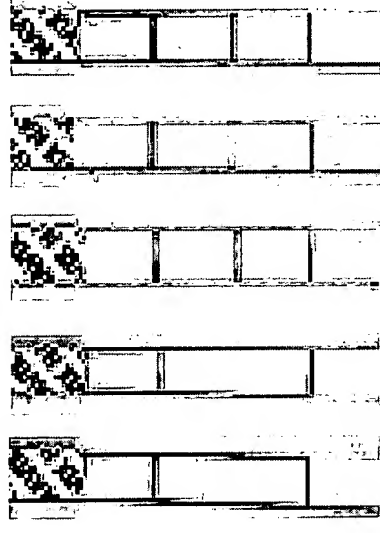
(ELISA result)

Sensitivity in ELISA:

~25-50 Pf sporozoites

Pv210 infected mosquitoes

1MQ, 1MQ, 2MQ, 3MQ, 5MQ



0 0 400 35 75

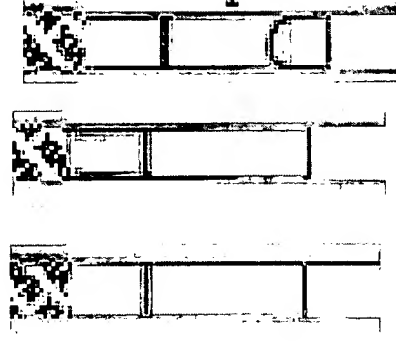
Pv210 sporozoites

(ELISA result)

~25-50 Pv210 sporozoites

Pv247 infected mosq.

1MQ, 3MQ, 5MQ



12.5 <12.5 50

Pv247 sporozoites

(ELISA result)

~50 Pv247 sporozoites